WHAT IS CLAIMED:

1. A method for routing an event to a human interface object in a computer system, said method comprising:

assigning a routing type to an event;

receiving an event;

determining the routing type of the received event; and

routing the event to a human interface object based on the determined routing type for the event.

2. A method as defined in claim 1 wherein said routing type is a member of a set including a first routing type that is routed based on geometric coordinates of an event and a second routing type that is routed based on an input focus.

3. A method as defined in claim 2 wherein the set further includes a third routing type that is broadcast to a plurality of interface objects.

4. A method as defined in claim 1 wherein the routing type is one of an extensible plurality of routing types, wherein routing types can be added to said plurality.

5. A method as defined in claim 4 wherein said routing types can be deleted from said plurality.

6. A method as defined in claim 1 wherein one or more clients can register interest in an event such that when the event is received, the event is sent to each client which registered interest.

7. A method as defined in claim 6 wherein a client can unregister interest in an event.

8. A method as defined in claim 6 wherein an indication as to interest is maintained for each event and is updated when a client registers and unregisters interest in the event.

9. A method as defined in claim 8 wherein the indication is a count which is incremented when a client registers interest in the event and is decremented when a client unregisters interest in the event.

10. A method as defined in claim 8 wherein said indication as to interest is maintained by adding an event to a handler table.

11. A method as defined in claim 10 wherein when the indication no longer indicates interest in an event, the event is removed from said handler table.

12. The method of claim 1, wherein the routing type of a particular event defines the mechanism for routing that event to a user interface object.

13. An apparatus for routing an event to a human interface object in a computer system, said apparatus comprising:

an assignor for assigning a routing type to an event;

an event receiver for receiving an event;

a routing type determiner coupled to said event receiver for determining the routing type of the received event; and

a router coupled to said routing type determiner for routing the event to a human interface object based on the determined routing type for the event.

14. An apparatus as defined in claim 13 wherein said routing type is a member of a set including routing types of geometric and focus.

15. An apparatus as defined in claim 14 wherein the set further includes a third routing type that is broadcast to a plurality of interface objects.

16. ı apparatus as defined in claim 13 wherein the routing type is one of an extensible plurality of routing types, wherein routing types can be added to said plurality.

17. An apparatus as defined in claim 16 wherein said routing types can be deleted from said plurality.

18. An apparatus as defined in claim 13 wherein a client can register interest in an event such that when the event is received, the event is sent to each client which registered interest.

19. An apparatus as defined in claim 18 wherein a client can unregister interest in an event.

20. An apparatus as defined in claim 18 wherein an indication as to interest is maintained for each event and is updated when a client registers and unregisters interest in the event.

21. An apparatus as defined in claim 20 wherein the indication is maintained in a counter containing a count which is incremented when a client registers interest in the event and is decremented when a client unregisters interest in the event.

22. An apparatus as defined in claim 21 wherein said indication as to interest is maintained by adding an event to a handler table.

23. An apparatus as defined in claim 22 wherein when the indication no longer indicates interest in an event, the event is removed from said handler table.

24. The apparatus of claim 13, wherein the routing type of a particular event defines the mechanism for routing that event to a user interface object.

25. A computer-readable medium having stored thereon instructions for causing a computer to perform the steps of:

receiving an event;

determining a routing type of the received event; and

routing the event to a human interface object based on the determined routing type for the event.

26. A computer-readable medium as defined in claim 25 wherein said routing type is one of a set of a first routing type that is routed based on geometric coordinates of an event and a second routing type that is routed based on an input focus.

27. A computer-readable medium as defined in claim 26 wherein said set further includes a third routing type that is broadcast to a plurality of interface objects.

28. The computer-readable medium of claim 25, wherein the routing type of a particular event defines the mechanism for routing that event to a user interface object.

29. A method for routing an event to a human interface object in a computer system, each kind of event being assigned a routing type, said method comprising:

receiving an event;

determining the routing type assigned to events of the kind of the received event; and

routing the event to a human interface object based on the determined routing type of the event.

30. A method as defined in claim 29 wherein said routing type is one of a set of a first routing type that is routed based on geometric coordinates of an event and a second routing type that is routed based on an input focus.

31. A method as defined in claim 30 wherein said set further includes a third routing type that is broadcast to a plurality of interface objects.

32. The method of claim 29, wherein the routing type of a particular event defines the mechanism for routing that event to a user interface object.

33. A computer-readable medium having stored thereon one or more routing data structures for specifying a routing type for each kind of event being handled, the routing type of a particular event defines a mechanism for routing that event to a human interface object.

34. A computer-readable medium as defined in claim 33 wherein said one or more routing data structures further includes a routing map which specifies code for each routing type, the code capable of routing events according to that particular routing type.

35. A computer-readable medium as defined in claim 33 wherein said one or more routing data structure specifies an interest indication for each event, the interest indication indicating whether applications are registered to receive that kind of event.

36. A method for routing an event to a human interface object in a computer system wherein an event has an associated routing type, said method comprising:

receiving an event;

determining the routing type of the received event; and

routing the event to a human interface object based on the determined routing type.

37. A method as defined in claim 36 wherein said routing type is one of a set of a first routing type that is routed based on geometric coordinates of an event and a second routing type that is routed based on an input focus.

38. A method as defined in claim 37 wherein said set further includes a third routing type that is broadcast to a plurality of interface objects.

39. The method of claim 36, wherein the routing type of a particular event defines the mechanism for routing that event to a user interface object.

40. A method as defined in claim 36 wherein said routing type is one of a set of routing types, said set of routing types including at least one of:

a first routing type, a second routing type, or a third routing type;

wherein said first routing type is routed based on geometric coordinates of an event;

wherein said second routing type is routed based on an input focus; and

wherein said third routing type is broadcast to a plurality of interface objects.

41. A method for routing an event to a human interface object in a computer system, said method comprising:

assigning a routing type to an event;

receiving an event;

determining the routing type of the received event;

routing events to a human interface object based on the determined routing type for each respective event;

determining whether there are one or more clients currently registered as being interested in the received event; and

if there are one or more clients currently registered as being interested in the received event, then sending the received event to each of the one or more clients that are currently registered as being interested in the received event.

42. The method of claim 41, wherein the routing type of a particular event defines the mechanism for routing that event to a user interface object.

43. An apparatus for routing an event to a human interface object in a computer system, said apparatus comprising:

an assignor for assigning a routing type to an event;

an event receiver for receiving an event;

a routing type determiner coupled to said event receiver for determining the routing type of the received event;

a router coupled to said routing type determiner for routing events to a human interface object based on the determined routing type for each respective event; and

an indication count for each event, each indication count for indicating interest in the received event from one or more clients, wherein when a client registers or unregisters interest in the received event, the indication count for that event is updated.

44. The apparatus of claim 43, wherein the routing type of a particular event defines the mechanism for routing that event to a user interface object.

45. A method for routing an event to a human interface object in a computer system, wherein the event is assigned a routing type, said method comprising the steps of:

receiving an event;

determining the routing type of the received event;

identifying clients which have registered an interest in events of the determined routing type; and

routing the event to a human interface object of the identified clients.

46. A method as defined in claim 45, wherein said routing type is a member of a set including a first routing type that is routed based on geometric coordinates of an event and a second routing type that is routed based on an input focus.

47. A method as defined in claim 46, wherein the set further includes a third routing type that is broadcast to a plurality of interface objects.

48. A method as defined in claim 45, further including the steps of maintaining an indication as to interest for an event, and updating said indication when a human interface object client registers and unregisters interest in the event.

49. The method of claim 45, wherein the routing type of a particular event defines the mechanism for routing that event to a user interface object.

50. An apparatus for routing an event to a human interface object in a computer system, wherein the event is assigned a routing type, said apparatus comprising:

an event type register for storing clients' interests in events of different routing types;

an event receiver for receiving an event;

a routing type determiner coupled to said event receiver for determining the routing type of an event received by said event receiver;

an event manager for identifying clients which have registered an interest in the determined routing type; and

a router responsive to said event manager for routing received event to a human interface object of the identified clients.

51. An apparatus as defined in claim 50, wherein said routing type is a member of a set including a first routing type that is routed based on geometric coordinates of an event and a second routing type that is routed based on an input focus.

52. An apparatus as defined in claim 50, wherein the set further includes a third routing type that is broadcast to a plurality of interface objects.

53. The apparatus as defined in claim 50, further including the steps of maintaining an indication as to interest for a routing type associated with received events, and updating said indication when a human interface object client registers and unregisters interest in a routing type.

54. The apparatus of claim 50, wherein the routing type of a particular event defines the mechanism for routing that event to a user interface object.

55. A method for routing an event to a human interface object in a computer system, said method comprising:

determining a routing type of a received event; and

routing the received event to a human interface object based on the determined routing type;

wherein said routing type is a member of a set including a first routing type that is based on geometric coordinates of an event and a second routing type that is routed based on an input focus.

56. The method of claim 55, wherein the set further includes a third routing type that is broadcast to a plurality of interface objects.

57. The method of claim 55, wherein the routing type of a particular event defines the mechanism for routing that event to a user interface object.

58. A method for routing an event to a human interface object, comprising the steps of:

determining a routing type of a received event; and

routing the received event to a human interface object based on the determined routing type for the event.

59. The method of claim 58, wherein the routing type of a particular event defines the mechanism for routing that event to a user interface object.